

CLAIMS

Please amend the claims as follows:

1. (currently amended) A computer program product for estimating the bandwidth of a connection between a client and a server, the computer program product comprising a ~~set of~~ computer executable instruction[[s]] set stored on a computer readable medium, the instruction set including medium comprising:

~~a snippet for requesting the server to serve, consecutively, first and second objects to the client;~~

~~computer code means~~ instructions for delivering ~~a~~ the snippet to the client responsive to the client accessing the server, wherein the snippet is an executable configured to request the server to serve, consecutively, first and second objects to the client;

~~computer code means for invoking the snippet to execute on the client;~~

~~computer code means~~ instructions for consecutively transmitting ~~sending~~ the first and second objects to the client responsive to at least one request from the snippet; and

~~computer code means~~ instructions for determining the time interval between delivery of the first and second objects and for estimating the bandwidth therefrom.

2. (currently amended) The computer program product of claim 1, wherein the ~~code means~~ instructions for consecutively transmitting ~~requesting~~ the first and second objects comprise[[s]] ~~code means~~ instructions for consecutively transmitting ~~identifying~~ the first and second objects in response to at least one request specifying with URL[']s that are unique on a network connecting the client and the server.

3. (currently amended) The computer program product of claim 2, wherein the ~~code means~~ instructions for transmitting the first and second objects to the client comprise ~~code means~~ instructions for transmitting the first and second objects to the client from a content distribution network server that is architecturally proximal to an ISP of the client.

4. (original) The computer program product of claim 3, where the second object has a size less than or equal to a minimum transmission unit associated with the network, wherein the second object is prevented from fragmentation.

5. (currently amended) The computer program product of claim 1, and further comprising the snippet, wherein the snippet includes:

~~code means~~ instructions for creating first and second image objects;

~~code means~~ instructions for generating a unique identifier (uniqueID); and

~~code means~~ instructions for associating the first and second image objects with the first and second objects on the server using URLs containing the uniqueID.

6. (currently amended) The computer program product of claim 5, further comprising ~~code means~~ instructions for ignoring, by the server, the uniqueID in the first and second URL[[]]s, wherein requests for the first and second objects from any client are served from a single pair of objects on the server, regardless of the uniqueID in the URL[[]]s received by the server.

7. (currently amended) The computer program product of claim 5, wherein the ~~code means~~ instructions for generating the uniqueID include[[]] ~~code means~~ instructions for deriving the unique identifier based on a time of day value and a random number.

8. (currently amended) The computer program product of claim 5, ~~further comprising code means~~ wherein the at least one request includes a first request for the first object and a second request for the second object, and wherein the instruction set further includes instructions for responding to [[a]] the first request for the first object only after [[a]] the second request for the second object having the same uniqueID as the uniqueID associated with the first request for the first object has been received.

9. (currently amended) The computer program product of claim 1, further comprising: ~~code means~~ instructions for invoking the snippet multiple times to obtain multiple estimates of the bandwidth; and

~~instructions code~~ means for selecting the a highest obtained bandwidth from among the multiple estimates of the bandwidth as the estimated bandwidth.

10. (currently amended) A method for providing a service for estimating the obtainable bandwidth of a client's network connection, said method comprising:

~~enabling a service provider receiving, from a server, to a request from a service provider for an~~ bandwidth estimation of the a bandwidth of a connection between the server and the client;

the service provider responding to the request for bandwidth estimation by providing the client with a snippet ~~that is an executable configured to request for requesting~~ the server to serve first and second objects, in a chronologically sequential manner, to the client via the connection;

~~the service provider receiving, from invoking the snippet at the client, to have the client request the first and second objects from the server, wherein the snippet returns information to the service provider~~ indicative of the amount of time elapsed ~~elapsing~~ between delivery of the first and second objects; and

estimating the ~~obtainable~~ bandwidth of the connection based in part on the elapsed time.

11. (currently amended) The ~~service~~ method of claim 10, further comprising, maintaining response time data for the server and alerting the server based the server response time for a selected client and the estimated bandwidth associated with the selected client.

12. (currently amended) The ~~service~~ method of claim 10, wherein the snippet identifies the first and second objects with URL[[]]s that are unique on the network connecting the client and the server.

13. (currently amended) The ~~service~~ method of claim 12, wherein the server responds to the requests for the first and second objects by transmitting the first and second objects to the client from a content distribution network server that is architecturally proximal to an ISP server to which the client is connected.

14. (currently amended) The service method of claim 13, where the second object has a size less than or equal to a minimum transmission unit associated with the network, wherein the second object is prevented from fragmentation.

15. (currently amended) The service method of claim 14, further comprising invoking the snippet multiple times to obtain multiple estimates of the bandwidth and selecting the highest bandwidth estimate.

16. (currently amended) The service method of claim 10, wherein the snippet includes:

~~code means~~ instructions for creating first and second image objects;

~~code means~~ instructions for generating a unique identifier (uniqueID); and

~~code means~~ instructions for associating the first and second image objects with the first and second objects on the server using URLs containing the uniqueID.

17. (currently amended) A server in a data processing network connecting the server to a client through the client's ISP, the server being configured to:

provide, to the client in response to the client accessing the server, a bandwidth estimation snippet that is an executable to the client, ~~the bandwidth estimation snippet being~~ configured to request the server to transmit, in chronologically adjacent transactions, first and second objects to the client;

identify a request generated by the snippet as a request for bandwidth estimation and respond to the request by providing the client with the first and second ~~data~~ objects; and

receive information from the client indicative of ~~the~~ time elapsing between delivery of the first and second objects.

18. (currently amended) The server of claim 17, wherein the bandwidth estimation snippet requests the first and second objects from the server using first and second URL[[]]s that are unique throughout the network and to the particular request.

19. (currently amended) The server of claim 17, wherein the first and second URL[']s each include a unique portion derived from the time of day associated with the request and a random number.

20. (currently amended) The server of claim 17, wherein the server provides the client with the first and second data objects by providing the first and second objects to a content distribution network (CDN) server that is architecturally proximal to the client ISP, wherein the client receives the first and second objects from the CDN server.